



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,439	01/10/2002	David B. Lektion	RSW920010100US1	1339

7590 06/30/2005

IBM Corporation
T81/503
PO Box 12195
Research Triangle Park, NC 27709

EXAMINER

REILLY, SEAN M

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,439

Applicant(s)

LECTION ET AL.

Examiner

Sean Reilly

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is a first action on the merits of this application. Claims 1-43 are presented for further examination.

Priority

1. The effective filing date for the subject matter defined in the pending claims in this application is 1/10/2002.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 21-43 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
3. Regarding claims 21-43, Applicant claims a "module" or "means" or "instructions," which are software per se. A software program which is not tangibly embodied on a computer readable medium, is merely a manipulation of abstract ideas. With specific regard to claims 41-43, which each claim a computer readable medium, a computer readable medium as defined by applicant is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 28, lines 12-24, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., hard disk drives) and intangible embodiments (e.g., transmission-type media). As such, the claims are not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 5, 7-13, 23, 25, 27-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. With regard to claims 3, 5, 7-13, 23, 25, and 27-37, the terms “edit topic” and “transaction topic” render each claim indefinite. The term “topic” is indefinite in the context of the claims. Applicant must clearly point out how a topic relates to a messaging service. Additionally it is not clear whether the terms “edit” and “transaction” imply a specific action to take or are rather just an identifier for naming various queues.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Kermarrec et al. (A Framework for Consistent, Replicated Web Objects; hereinafter Kermarrec).
7. With regard to claims 1 and 41, Kermarrec disclosed a method for processing shared data comprising:

- receiving a request to perform a task on shared data (e.g. pg 282 Clients method call or Object communication pg 278);
- creating a work item message for the task (pg 282 Clients – messages to server) ; and
- publishing the work item message to a messaging service (pg 278; Control object).

8. With regard to claims 2-5, 22-25, Kermarrec disclosed the task is one of an edit task (edit topic with regard to claim 3) (e.g. write task updates an object pg 279 Coherence models) and an unlocking or locking task (transaction topic with regard to claim 5) (pg 278 section 3:1, e.g. object binding and replication management).

9. With regard to claims 6, 21, 26, and 42, Kermarrec disclosed a method for processing shared data comprising:

- receiving a work item message from a messaging service (e.g. pg 282 Clients method call or Object communication pg 278);
- processing the work item message (e.g. processing client writes pg 281 4.1); and
- publishing a result to the messaging service (e.g. updates to the replicas following the specified coherence model; pg 281 4.1).

10. With regard to claims 7, 13, 27, and 33, Kermarrec disclosed the step of receiving a work item message comprises consuming a work item message from an edit or transaction topic (control objects) (control object process management; pg 278).

11. With regard to claims 8 and 28, Kermarrec disclosed placing the work item message in an edit queue (e.g. pg 278 Control object receiving invocation requests or the Control objects sending requests to other objects such as the replication object).

Art Unit: 2153

12. With regard to claims 9 and 29, Kermarrec disclosed determining whether the work item message was created by a current server cluster node (object client is binds with pg 278 a system model); and performing a request task corresponding to the work item message if the work item message was created by the current server cluster node (e.g. following the PRAM coherence model for writes by a particular client).

13. With to claims 10 and 30, Kermarrec disclosed the step of processing the work item message further comprises: waiting until the work item message is removed from the edit queue if the work item message was not created by the current server cluster node (e.g. in the PRAM coherence model, delaying until the record has been added to the store's replica).

14. With regard to claims 11-12, 15-17, 19, 20, and 31-32, 35-37, 39-40, Kermarrec disclosed the step of processing the work item message comprises locking and unlocking a portion of the shared data for modification in persistent storage or memory (e.g. in the PRAM coherence model writing client requests in order pg 279) (for storage and memory see inter alia, pg 278 section 3.1).

15. With regard to claims 14 and 34, Kermarrec disclosed performing a request task corresponding to the work item message on a clone of at least a portion of the shared data (objects replicated at different stores; pg 278 3.1).

16. With regard to claims 18, 38, and 43, Kermarrec disclosed a method for processing shared data comprising: receiving a result from a messaging service (Control object message to replication object) pg 278; processing the result; and updating the shared data based on the result (updating replicas (Replication object management pg 278)).

Conclusion

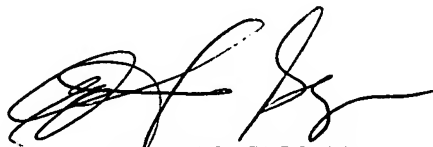
17. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.
18. This office action is made **NON-FINAL**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


6/20/2005


GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100